

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: July 11, 1997

Date Received: July 1, 1997

Project: Metro Self Monitor, PO #M57705

Date Samples Extracted: July 9, 1997

Date Extracts Analyzed: July 10, 1997

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, AND ZINC
USING METHOD 6010**

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M57705	0.35	0.31	0.29	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS FOR
 THE ANALYSIS OF WATER SAMPLES
 FOR TOTAL METALS BY
 INDUCTIVELY COUPLED PLASMA (ICP)
 (METHOD 6010)**

Laboratory Code: 79314 (Duplicate)

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>Relative Percent Difference</u>	<u>Acceptance Criteria</u>
Chromium	mg/L (ppm)	0.35	0.35	0	0-20
Copper	mg/L (ppm)	0.31	0.32	3	0-20
Nickel	mg/L (ppm)	0.29	0.29	0	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 79314 (Matrix Spike)

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Spike Level</u>	<u>Sample Result</u>	<u>% Recovery</u>		<u>Acceptance Criteria</u>	<u>Relative Percent Difference</u>
				<u>MS</u>	<u>MSD</u>		
Chromium	mg/L (ppm)	5	0.35	95	91	80-120	4
Copper	mg/L (ppm)	5	0.31	97	92	80-120	5
Nickel	mg/L (ppm)	10	0.29	96	92	80-120	4
Zinc	mg/L (ppm)	5	<0.05	93	91	80-120	2

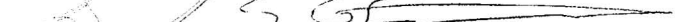
Laboratory Code: Spike Blank

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Spike Level</u>	<u>% Recovery</u>		<u>Acceptance Criteria</u>	<u>Relative Percent Difference</u>
			<u>MS</u>	<u>MSD</u>		
Chromium	mg/L (ppm)	5	97	95	80-120	2
Copper	mg/L (ppm)	5	99	97	80-120	2
Nickel	mg/L (ppm)	10	97	97	80-120	0
Zinc	mg/L (ppm)	5	96	94	80-120	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.



KJ BI
07.01.97
2:10

2:10

WTE NO. R 35	PROJECT NAME METRO Self monitor	PURCHASE ORDER # M 57705
SAMPLERS (signature) 		PROJECT LOCATION B200 6th Ave S
REMARKS		SAMPLE DISPOSAL INFORMATION

REMARKS	SAMPLE DISPOSAL INFORMATION
	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	GERALD A. Thompson	ACW	7/1/97	1:58 PM
Received by: 	TOM RUSSELL	FBI	7.1.97	1:59 PM
Relinquished by:				
Received by:				

AKC-0011424

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Beth Albertson, M.S.
Charlene Jensen, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.
Melanie Kirol, B.S.

July 11, 1997

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Seattle, WA 98119-2029
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**INVOICE # 97ACU0711-1
DUPLICATE COPY**

Accounts Payable
Alaskan Copper Works
628 South Hanford St.
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M57705: Results of testing requested by
Gerald Thompson, Project Manager for material submitted on July 1, 1997.

1 water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FEDERAL TAX ID #(b) (6)

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July 11, 1997

**Gerald Thompson, Project Manager
Alaskan Copper Works
628 South Hanford St.
Seattle, WA 98134**

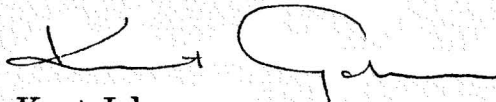
Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 1, 1997 from your Metro Self Monitor, PO #M57705 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



**Kurt Johnson
Chemist**

**keh
Enclosures
ACU0711R.DOC**